

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (previously presented): A method of making a silicone rubber article having a structure adapted for growth of cells or living tissue, comprises mixing a biologically acceptable sacrificial filler with a silicone rubber precursor, curing the resultant mixture at a temperature below 180°C, and removing the sacrificial filler to form a porous silicone rubber.

Claim 2 (original): A method as claimed in claim 1. wherein the silicone rubber precursor can be cured or vulcanized at room temperature.

Claim 3 (original): A method as claimed in claims 1 or 2, wherein the biologically-acceptable sacrificial filler is bio-compatible, such that it is innately non-toxic and does not leave a toxic residue.

Claim 4 (previously presented): A method as claimed in claims 1 or 2, wherein the sacrificial filler does not interact chemically with the silicone rubber precursor or with the resultant silicone rubber and is stable at temperatures used to cure the resultant mixture.

Claim 5 (currently amended): A method as claimed in claims 1 or 2, wherein the sacrificial filler is granular ~~and, preferably, crystalline~~.

Claim 6 (previously presented): A method as claimed in claims 1 or 2, wherein the sacrificial filler is amorphous.

Claim 7 (currently amended): A method as claimed in claims 1 or 2, wherein the sacrificial filler is ground ~~and, preferably, classified~~, prior to contacting the silicone rubber precursor.

Claim 8 (original): A method as claimed in claim 7, wherein the sacrificial filler is wet-milled, prior to mixing with the silicone rubber precursor.

Claim 9 (currently amended): A method as claimed in claim 7, wherein the sacrificial filler is milled to a particle size of 0.01-10  $\mu\text{m}$ , ~~preferably 0.05-1  $\mu\text{m}$ , and most preferably 0.1-0.4  $\mu\text{m}$ .~~

Claim 10 (previously presented): A method as claimed in claim 8, wherein the sacrificial filler is an inorganic salt and is milled in an organic solvent.

Claim 11 (previously presented): A method as claimed in claim 1, wherein the sacrificial filler is an inorganic salt selected from the group consisting of metal halides, metal carbonates and metal bicarbonates.

Claim 12 (original): A method as claimed in claim 11, wherein the inorganic salt is selected from the group consisting of lithium bicarbonate, sodium bicarbonate, potassium bicarbonate, lithium chloride and potassium chloride.

Claim 13 (original): A method as claimed in claim 12, wherein the sacrificial filler is sodium bicarbonate or sodium chloride, preferably food grade sodium bicarbonate or sodium chloride.

Claim 14 (original): A method as claimed in claim 13, wherein the sodium bicarbonate or sodium chloride is wet-milled under xylene.

Claim 15 (currently amended): A method as claimed in claim 1, wherein the sacrificial filler is removed by dissolution, ~~preferably in an aqueous solvent.~~

Claim 16 (original): A method as claimed in claim 15, wherein the sacrificial filler does not cause swelling of the silicone rubber when removed using an aqueous solvent.

Claim 17 (original): A method as claimed in claim 16, wherein the sacrificial filler is sodium bicarbonate.

Claim 18 (previously presented): A method as claimed in claim 1, wherein free -OH groups of the silicone rubber are chemically modified, so as to enhance cell adherence.

Claim 19 (previously presented): A method as claimed in claim 1, wherein the surface of the silicone rubber is charged by bombardment with electrons.

Claim 20 (previously presented): A method as claimed in claim 1, wherein the silicone rubber precursor comprises at least one additive that is not removed with the sacrificial filler and serves to impart desired physical properties to the rubber.

Claim 21 (original): A method as claimed in claim 20, wherein the additive is a metal powder or carbon black and serves to render the silicone rubber electrically conductive.

Claim 22 (original): A method as claimed in claim 21, wherein the additive is stainless steel powder.

Claim 23 (original): A method as claimed in claim 21, wherein the additive is iron oxide.

Claim 24 (currently amended): A method as claimed in claim 20, wherein the additive is an inert substance, ~~such as glass~~, and serves to render the silicone rubber mechanically rigid.

Claim 25 (previously presented): A method as claimed in claim 1, wherein a surface of the silicone rubber precursor is contacted with the sacrificial filler, so as to form a structured silicone rubber having a textured surface.

Claim 26 (original): A method as claimed in claim 25, wherein the textured surface of the silicone rubber facilitates attachment of adherent cells.

Claim 27 (original): A method as claimed in claims 25 or 26, wherein the textured surface of the silicone rubber provides as increased number of sites for attachment of cells relative to an untextured surface.

Claim 28 (canceled).

Claim 29 (canceled).

Claim 30 (canceled).

Claim 31 (canceled).

Claim 32 (canceled):

Claim 33 (canceled).

Claim 34 (canceled).

Claim 35 (original): A method as claimed in claim 34, wherein the pores of the silicone rubber provide sites of attachment for cells.

Claim 36 (canceled).

Claim 37 (currently amended): A method as claimed in claim 1, wherein the resultant mixture is shaped prior to curing, ~~preferably by moulding or extrusion.~~

Claim 38 (currently amended): A method as claimed in claim 1, wherein the pores are 1  $\mu\text{m}$  - 0.5 mm, ~~preferably 10  $\mu\text{m}$  - 0.2 mm, and most preferably 50 to 150  $\mu\text{m}$~~  in diameter.

Claim 39 (previously presented): A method as claimed in claim 1, wherein the porous silicone rubber is cut to a desired size or shape.

Claim 40 (canceled).

Claim 41 (previously presented): A porous silicone rubber obtained by a method according to claim 1.

Claim 42 (canceled).

Claim 43 (previously presented): A biomedical device or apparatus comprising a porous silicone rubber as claimed in claim 41.

Claim 44 (canceled).

Claim 45 (canceled).

Claim 46 (canceled).

Claim 47 (canceled).

Claim 48 (canceled).

Claim 49 (canceled).

Claim 50 (canceled).

Claim 51 (canceled).

Claim 52 (canceled).

Claim 53 (canceled).

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Claim 80 (canceled).

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Claim 89 (canceled).

Claim 90 (canceled).

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Claim 92 (canceled).

Claim 93 (canceled).



Claim 94 (canceled).

Claim 95 (canceled).

Claim 96 (canceled).

Claim 97 (canceled).

Claim 98 (canceled).

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Claim 146 (canceled).

Claim 147 (canceled).

Claim 148 (canceled).

Claim 149 (canceled).

Claim 150 (canceled).

Claim 151 (canceled).

Claim 152 (canceled).

Claim 153 (canceled).

Claim 154 (canceled).

Claim 155 (canceled).

Claim 156 (canceled).

Claim 157 (canceled).

Claim 158 (canceled).

Claim 159 (canceled).

Claim 160 (canceled).

Claim 161 (canceled).

Claim 162 (new): A method as claimed in claim 5 wherein the sacrificial filler is crystalline.

Claim 163 (new): A method as claimed in claim 7 wherein the sacrificial filler is classified prior to contacting the silicone rubber precursor.

Claim 164 (new): A method as claimed in claim 9, wherein the sacrificial filler is milled to a particle size of 0.05-1  $\mu\text{m}$ .

Claim 165 (new): A method as claimed in claim 9, wherein the sacrificial filler is milled to a particle size of 0.1-0.4  $\mu\text{m}$ .

Claim 166 (new): A method as claimed in claim 15, wherein the sacrificial filler is removed by dissolution in an aqueous solvent.

Claim 167 (new): A method as claimed in claim 24, wherein the additive is glass, and serves to render the silicone rubber mechanically rigid.

Claim 168 (new): A method as claimed in claim 37, wherein the resultant mixture is shaped prior to curing, by molding or extrusion.

Claim 169 (new): A method as claimed in claim 38, wherein the pores are 10  $\mu\text{m}$  - 0.2 mm in diameter.

Claim 170 (new): A method as claimed in claim 38, wherein the pores are 50 to 150  $\mu\text{m}$  in diameter.